

TUNGSTEN OUTPUT SHOWS DECREASE

Limited Purposes for Which
Metal Adapted Discourages
Its Production.

INCREASE SEEMS NEAR
Experiments Show Metal Will
Likely Have Important
War Influences.

Last year there was a sharp decrease in the production of tungsten ore owing to the decrease in the demand for tool steels, in which the bulk of the tungsten produced is used, according to Frank L. Hess, in a report on this metal just issued by the United States geological survey. The production of domestic tungsten ore in 1911 amounted to 1139 short tons of concentrates, carrying 60 per cent of tungsten trioxide, valued at \$407,935; in 1910 the production amounted to 1829 short tons, valued at \$532,992.

What Metal Used For.

Tungsten is used chiefly in making steels that will hold their temper when heated, but it is most generally known as supplying the filament of tungsten incandescent lamps. The great improvements in drilling, tunnelling and other instruments in drilling tungsten bits and

Other notable improvements in the size of the globe of the tungsten lamp and in other mechanical details that add greatly to its efficiency are making it encroach upon the carbon-filament lamp and the arc lamp, and it is rapidly driving from the market the tantalum lamp, which was the first good incandescent lamp.

At first it did not seem possible to drill small enough holes through the diamonds to make wire sufficiently fine for lamps of small candlepower, but wire 0.0006 inch in diameter can now be drawn

in quantity. The total capacity of tungsten ore used for electric lights, however, amounts to only a few tons a year. New uses of tungsten, in making electric furnaces, electric contacts and targets for Roentgen rays, have been developed, and the last two products are being actively manufactured.

Purposes of War.

Even for purposes of war tungsten may have its uses, and investigations are now being made with a view to its application in the manufacture of projectiles.

The present small-arm service projectile is made of lead with a jacket of copper-nickel alloy. The principal advantage of lead over iron, which would of course be cheaper, is that it has a higher specific gravity. Because of this fact a lead bullet will have a smaller cross section and

Advantage of Metal.

lead is not an advantage, a soft-nosed bullet being tabooed in civilized warfare. For this reason and because of the fact that it is too weak to hold the rifling it has to be jacketed with copper-nickel alloy. To take the rifling and to act as a gas check, the tungsten bullet has to be of copper base or its equivalent at the base. The hardness and high tensile strength of wrought tungsten will give the projectile a sharp point and the fine point of tungsten will prevent the projectile from being harmfully upset at the base by the combined action of the high temperature and rapid vibration which attend the combustion of the powder charge.

The following act of congress was approved on August 24, 1912, in regard to agricultural entries upon Utah oil and

gas lands:
"Unreserved public lands of the United States in the state of Utah, which have been withdrawn or classified as oil lands, or are available for oil, shall be subject to appropriate entry under the homestead laws by actual settlers only, under the desert land law to the extent of 160 acres only, to selection by the state of Utah under congressional grants and the Carey act, to withdrawal under the reclamation

act, and to disposition by the secretary of the interior under the law providing for sales of isolated tracts; reserving always to the United States the oil and gas rights in such lands, with the right to

prospect and remove the same upon payment of damages to the agricultural patentee for actual injuries suffered by him."

Nevadas in San Francisco.

James A. Pollock & Co., bankers and brokers, furnish the following, received over their private wire yesterday afternoon:

	Bid.	Asked.
Goldfield—		
Columbia Mountain	\$.....	\$.04
Jumbo Extension34	

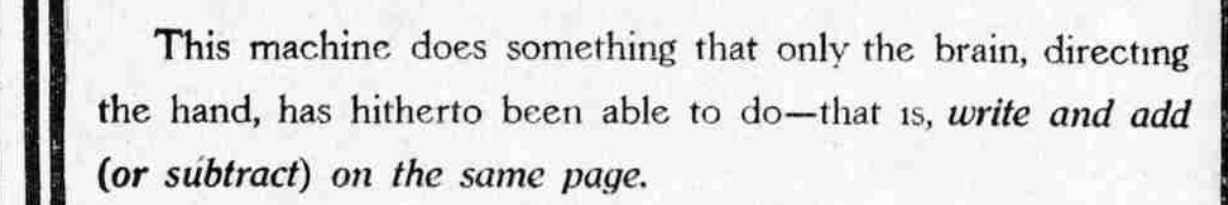
Booth	05	07
Blue Bull	06	08
Silver Pick		11
Lone Star	04	05
Oro		03
Atlanta	18	
Florence		55
Dynalco B. E. Con	01	01
Greifeld Dairy	01	01
Combination Fraction	02	03
Keweenaw		02
Yellow Tiger	03	01
Goldfield Consolidated	2.65	2.70
C. O. D.	08	08
Merger Mines	28	29

Ohio	41	42
Mexican	2	59
Consolidated Virginia	55	55
Salute	10	36
Hale & Norcross	10	11
Sierra Nevada	19	20
Milpach Extension	36	
Tonopah		
Tonopah Nevada		7.00
MacNamara	22	
Milpach	54	56
Tonopah Belmont	30	10.00
Tonopah North Star	41	42
West End Consolidated	1.45	1.47
Reize	19	19
Jim Butler	19	15
Monarch Pitts. Extn.	25	28
Tonopah Fergus	1.05	1.15
Monahan		
Manhattan Consolidated	19	20
G. Wedge	05	

White Caps	15
Manhattan Big Four	41
Other districts—	
Nevada Hills	7.75 1.75
Pittsburg Silver Peak99 1.00
Round Mountain49

Thus spoke the auditor. He was speaking of the

Remington
Adding and Subtracting
Typewriter
(Wahl Adding Mechanism)



But this is not all. It does such work *more easily, more rapidly, and more accurately* than the human brain has ever performed similar labor.

Thus the machine is *human* in what it does and *super-human* in the way it does it.

Illustrated booklet sent on request

Remington Typewriter Company
(Incorporated)

172 South West Temple Street

CHINO COSTS KEPT
DOWN TO LOW MARK

One in close touch with the operations at the China property informs us that the low cost of production, which the company has been showing for months, is maintained and that it would not be surprising if the figures for the quarter ended September 30 would be down to 65 cents per pound.

Preliminary figures for September produced by the company are as follows:

	Sept. 1-30	Aug. 1-31
Copper	78,900 lbs.	78,000 lbs.
Silver	1,000 lbs.	1,000 lbs.
Gold	100 lbs.	100 lbs.
Total value	\$1,000,000	\$1,000,000

The advance of 2 points and closed at the top. East Butte rallied to 16½, one interest taking 3000. Granby, which has been quietly accumulated of late, moved early on a small amount of buying. Rango was also in good demand. Altogether, we consider it the best market for coppers we have had on this movement, and think the whole list will gradually rise.

the Rain, the Rain, the beautiful Rain, was sure some people were getting wet, but how about the snow help the coal dealers?

It is quite likely they will not reach the estimate of 4,000,000 pounds, as during the past year a certain quantity of ore lying between two ore bodies in the steam-shovel pit, and which was more or less of a waste, was sent to the mill. In view of this, the recovery was not as great as it would otherwise have been. In producing the best, the best belief is that the future will differ but not in the direction of the preceding month. It is believed that the price of the ore which has been placed in the market will continue to move out into heavy trading at higher prices.

Logan & Bryan, New York.—While drastic measures are being taken, the recovery quite apparent from the course of prices today that the disposition to lighten long positions in the market is a more potent factor than to increase same. The expected volume of outside buying generally anticipated for the next few days is expected when the course of prices during previous seasons was such as to suggest undercurrents of buying.

FISHER-KITTLE COAL

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Office 277 South Main St.

cents per pound. The plant should witness a placing in commission of the fifth and last unit of the China mill. If the prediction of the management is proved correct, the plant should be ready by October 1, it may contribute for the entire month of the coming production. As the suit, either this month or next China production, the further large increase in production. The plant should witness only be a short time until the prop-

erty, despite the steadiness of American shares in London which was taken to denote a more cheerful feeling on the other side in connection with the situation in the Balkans. We have seen that many have purchased stocks around the high levels recently recorded, in anticipation of further substantial gains. The quoted security values, but as we have indicated recently, substantial banking in the market, and the fact that the market to encourage intense bullish operations.

Telephone Ex. 401.

ment is increasing, and this condition is growing more and more in favor of the eastern business men from day

and, judging from results which have been obtained production should soon be on a level to meet the demand for 100,000 pounds per annum. If this is realized, the mine will be at the head of the low-grade supply mines to start a good plant up to rated capacity, a thing which has been the dream of the other properties, notwithstanding that their plants were placed in commission far in advance of China's Thompson-Towle & Co.

	Rtd.	Ad.
Associated Oil	\$12.75	
Brookshire	40	
Clarendon	40	
Monte Cristo	31	
New Pennington	40	
Silver Tip	75	
S. W. & R.	40	
Turner	40	
W.K. Oil	1.15	

1. The first group of people who are not in the labor force are those who are not in the labor force because they are not in the labor force.